

ABSTRACT

Methods for detecting a cell damage relate to the discovery that proteases are selectively activated in subjects suffering from nervous system damage compared to samples from healthy subjects. Breakdown products reflecting activation of proteases 5 that degrade spectrin are produced. A cell injury is detected by providing a biological sample derived from the subject; detecting in the sample the presence of these breakdown products generated by multiple proteases, and correlating the presence of these breakdown products with the presence or type of cell damage.